

AMENDMENTS TO THE CLAIMS

Claims 1-12: (Canceled)

13. **(Currently Amended)** An isolated monoclonal murine internal image anti-idiotypic antibody (Ab2) to monoclonal antibodies-antibody BR55-2 (Ab1), wherein said monoclonal antibody has~~having~~ an inhibition capacity of more than 95% in terms of inhibition of binding of BR55-2 murine Ig2a to at least a Lewis Y carbohydrate expressing cell of a Lewis Y positive human breast cancer cell line at a concentration of less than or equal to a 10 fold excess of Ab2 to Ab1.

14. **(Previously Presented)** The antibody according to claim 13, wherein said antibody is an anti-idiotypic antibody to monoclonal antibody BR55-2, expressed by hybridoma cell line ATCC HB9324 or ATCC HB9347.

15. **(Currently Amended)** A pharmaceutical composition which comprises a monoclonal murine internal anti-idiotypic antibody (Ab2) according to claim 13 for immunization to produce an immune response against any Lewis Y carbohydrate-expressing cells, together with a pharmaceutically acceptable adjuvant, carrier or diluent, wherein each monoclonal antibody present in said composition has an inhibition capacity of more than 95% in terms of inhibition of binding of BR55-2 murine Ig2a to at least a Lewis Y carbohydrate expressing cell of a Lewis Y positive human breast cancer cell at a concentration of less than or equal to a 10 fold excess of Ab2 to Ab1.

16. **(Previously Presented)** The pharmaceutical composition of claim 15, wherein said Lewis Y carbohydrate-expressing cells are cancer cells of epithelial origin or small cell lung cancer cells.

17. **(Previously Presented)** The pharmaceutical composition of claim 15, wherein said Lewis Y carbohydrate-expressing cells are HIV infected cells.

18. **(Previously Presented)** The pharmaceutical composition of claim 17, wherein said cells are leukocytes.

19. **(Previously Presented)** The pharmaceutical composition of claim 15, wherein said anti-idiotypic antibody is an anti-idiotypic antibody to monoclonal antibody BR55-2, expressed by hybridoma cell line ATCC HB9324 or ATCC HB9347.

20. **(Withdrawn)** A method of immunization which comprises administering to a patient in need thereof an effective amount of the monoclonal antibody (Ab2) according to claim 13.

21. **(Withdrawn)** The method of claim 20, wherein said patient is HIV infected.

22. **(Withdrawn)** The method of claim 20, wherein said patient has cancer of epithelial origin or small cell lung cancer.

23. **(Previously Presented)** A process for the production of anti-idiotypic antibodies according to claim 13 which comprises the following steps:

- a) immunizing mice with BR55-2/murine IgG3F (ab')<sub>2</sub>-KLH-conjugate;
- b) fusing the murine spleen cells with the murine myeloma cell line SP 2/0;
- c) selecting the cultured hybridoma cells which produce IgG with an inhibition capacity of more than 95% (inhibition of binding of BR55-2 murine IgG2a to the SKBR5 cell line; and
- d) purifying and isolating the anti-idiotypic antibody.

24. **(Withdrawn)** A method of quantitatively determining the concentration of any molecule having the idio type of BR55-2 and the binding specificity to BR55-2, comprising contacting a sample containing antibodies to BR55-2 with the anti-idiotypic antibodies according to claim 13.

25. **(Withdrawn)** The method according to claim 24, wherein said molecule is a mouse/human chimera of BR55-2 or a fully humanized variant of BR55-2.

26. **(Withdrawn)** A method for a single step immunopurification of BR55-2 antibodies comprising contacting a sample containing said antibodies with a solid support comprising the anti-idiotypic antibodies of to claim 13 and isolating the BR55-2 antibodies that bind thereto.

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27. **(Withdrawn)** The method to claim 26, wherein said antibodies are variants of BR55-2.

28. **(Previously Presented)** A monoclonal murine internal anti-idiotypic antibody (ab2) to monoclonal antibodies BR55-2 (ATCC HB 9324) (ab1).